Please amend the application as follows:

## In the Claims

Please amend Claims 1, 5, 7, 8, 14, 30, 32 and 34. Amendments to the claims are indicated in the attached "Marked Up Version of Amendments" (pages i - xi).

1. (Twice Amended) A compound represented by the formula M-Y, wherein:

M is a monomeric building block, a solid surface or a gel having a reactive site that is masked by Y; and

Y is a photolabile protecting group selected from the group consisting of:

wherein:

the aromatic ring is optionally substituted with an alkoxy group or a methylenedioxy group;

A is O, S, N-alkyl, N-aryl, or  $(CH_2)_n$ ;

n is 0 to about 3;

B is an aprotic, weakly basic group;

R and  $R_1$  are each, independently, -H, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl group, or an optionally substituted heteroaromatic group.

- 5. (Twice Amended) A method of attaching a molecule with a reactive site to a support comprising the steps of:
  - (a) providing a support with a reactive site;
  - (b) binding a first molecule represented by the formula  $M_1$ - $Y_1$  to the reactive site, wherein:

 $M_1$  is a monomeric building block having a reactive site that is masked by  $Y_1$ ; and

Y<sub>1</sub> is a photolabile protecting group selected from the group consisting of:

$$R_1$$
 $R_1$ 
 $NO_2$ 
 $R_1$ 
 $NO_2$ 
 $NO_2$ 
 $NO_2$ 

$$NO_2$$

$$NO_2$$
 $R$ 
 $A-B$ 
, and

wherein:

the aromatic ring is optionally substituted with an alkoxy group or a methylenedioxy group;

A is O, S, N-alkyl, N-aryl, or  $(CH_2)_n$ ; n is 0 to about 3;

B is an aprotic, weakly basic group;

R and  $R_1$  are each, independently, -H, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl group, or an optionally substituted heteroaromatic group; and

- (c) removing  $Y_1$  to provide a derivatized support comprising  $M_1$  with an unmasked reactive site immobilized thereon.
- 7. (Twice Amended) The method of Claim 5, further comprising:
  - (a) coupling an additional molecule represented by the formula M<sub>1</sub>-Y<sub>1</sub> to the unmasked reactive site, wherein Y<sub>1</sub> of the additional molecule is selected from the group of photolabile protecting groups listed in Claim 5 and is the same as or different from Y<sub>1</sub> of the first molecule, and M<sub>1</sub> of the additional molecule is a monomeric building block and is the same as or different from M<sub>1</sub> of the first molecule, to produce a derivatized support having immobilized thereon a chain of the first and the additional molecules; and
  - (b) removing Y<sub>1</sub> from the additional molecule to provide a derivatized support with a chain of the first and the additional molecules with an unmasked reactive site immobilized thereon.
- 8. (Twice Amended) The method of Claim 7, further comprising repeating steps (a) and (b) to provide a chain of molecules immobilized on the support.
- 14. (Twice Amended) A method of forming, from component molecules represented by the formula M<sub>1</sub>-Y<sub>1</sub>, a plurality of compounds bound to a support, each compound occupying a separate predefined region of the support, said method comprising the steps of:
  - (a) activating a first region of the support;
  - (b) binding a molecule represented by the formula  $M_1-Y_1$  to the first region;
  - repeating steps (a) and (b) on other regions of the support whereby each of said other regions has bound thereto a molecule represented by the formula  $M_1$ - $Y_1$ ,

wherein  $M_1$  is the same as or different from  $M_1$  of step (b) and  $Y_1$  is the same as or different from  $Y_1$  of step (b);

- (d) removing  $Y_1$  from the  $M_1$  that is bound to one or more regions of the support to provide one or more regions having an unmasked reactive site;
- binding an additional molecule represented by the formula M<sub>1</sub>-Y<sub>1</sub> to the said one or more unmasked reactive sites, wherein M<sub>1</sub> is the same as or different from M<sub>1</sub> of steps (b) and (c) and Y<sub>1</sub> is the same as or different from Y<sub>1</sub> of steps (b) and (c); and
- (f) repeating steps (d) and (e) on regions of the support until a desired plurality of compounds is formed from the component molecules represented by formula M<sub>1</sub>- Y<sub>1</sub>, each compound occupying separate predefined regions of the support; wherein:

 $M_1$  is a monomeric building block having a reactive site that is masked by  $Y_1$ ; and  $Y_1$  is a photolabile protecting group selected from the group consisting of:

$$NO_2$$
  $R_1$   $NO_2$   $NO_2$   $NO_2$   $NO_2$   $NO_2$ 

$$R$$
 $R$ 
 $A \longrightarrow B$ , and

wherein:

the aromatic ring is optionally substituted with an alkoxy group or a methylenedioxy group;

A is O, S, N-alkyl, N-aryl, or  $(CH_2)_n$ ; n is 0 to about 3;

B is an aprotic, weakly basic group; and

R and  $R_1$  are each, independently, -H, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alknyl group, an optionally substituted aryl group, or an optionally substituted heteroaromatic group.

## 30. (Amended) A compound represented by the formula M-Y<sub>1</sub>, wherein:

M is a monomeric building block, a solid surface or a gel having a reactive site that is masked by  $Y_{\scriptscriptstyle \rm I};$  and

Y<sub>1</sub> is selected from the group consisting of:

$$H_3CO$$
 $NO_2$ 
 $NO_2$ 
,

, and 
$$H_3C$$

wherein R is -H, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl group, or an optionally substituted heteroaromatic group.

- 32. (Amended) A method of attaching a molecule with a reactive site to a support comprising the steps of:
  - (a) providing a support with a reactive site;
  - (b) binding a first molecule represented by the formula  $M_1$ - $Y_1$  to the reactive site, wherein:

 $M_{\scriptscriptstyle 1}$  is a monomeric building block having a reactive site that is masked by  $Y_{\scriptscriptstyle 1}$ ; and

Y<sub>1</sub> is a photolabile protecting group selected from the group consisting of:

$$H_3CO$$
 $NO_2$ 
 $NO_2$ 
,

$$NO_2$$
 $NO_2$ 
 $NO_2$ 
 $NO_2$ 
 $NO_2$ 
 $NO_2$ 
 $NO_2$ 
 $NO_2$ 

wherein:

R is -H, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl group, or an optionally substituted heteroaromatic group;

(c) removing  $Y_1$  to provide a derivatized support comprising  $M_1$  with an unmasked reactive site immobilized thereon;

- (d) coupling an additional molecule represented by the formula M<sub>1</sub>-Y<sub>1</sub> to the unmasked reactive site, wherein Y<sub>1</sub> and M<sub>1</sub> of the additional molecule are selected independent of the first molecule, to produce a derivatized support having immobilized thereon a chain of the first and the additional molecules;
- (e) removing Y<sub>1</sub> from the additional molecule to provide a derivatized support with a chain of the first and the additional molecules with a second unmasked reactive site immobilized thereon; and
- (f) repeating steps (d) and (e) with a succession of molecules, to provide a chain of molecules immobilized on the support.
- 34. (Amended) A method of forming, from component molecules represented by the formula  $M_1$ - $Y_1$ , a plurality of compounds bound to a support, each compound occupying a separate predefined region of the support, said method comprising the steps of:
  - (a) activating a first region of the support;
  - (b) binding a molecule represented by the formula M<sub>1</sub>-Y<sub>1</sub> to the first region;
  - repeating steps (a) and (b) on other regions of the support whereby each of said other regions has bound thereto a molecule represented by the formula M<sub>1</sub>-Y<sub>1</sub>, wherein M<sub>1</sub> is the same as or different from M<sub>1</sub> of step (b) and Y<sub>1</sub> is the same as or different from Y<sub>1</sub> of step (b);
  - (d) removing  $Y_1$  from the  $M_1$  that is bound to one or more regions of the support to provide one or more regions having an unmasked reactive site;
  - binding an additional molecule represented by the formula M<sub>1</sub>-Y<sub>1</sub> to the said one or more unmasked reactive sites, wherein M<sub>1</sub> is the same as or different from M<sub>1</sub> of steps (b) and (c) and Y<sub>1</sub> is the same as or different from Y<sub>1</sub> of steps (b) and (c); and
  - (f) repeating steps (d) and (e) on regions of the support until a desired plurality of compounds is formed from the component molecules represented by formula M<sub>1</sub>-Y<sub>1</sub>, each compound occupying separate predefined regions of the support; wherein:

 $M_1$  is a monomeric building block having a reactive site that is masked by  $Y_1$ ; and

Y<sub>1</sub> is a photolabile protecting group selected from the group consisting of:

$$NO_2$$
  $CH_3$   $OCH_3$   $OCH_3$ 

R is -H, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl group, or an optionally substituted heteroaromatic group.

## **REMARKS**

The remainder of this Amendment is set forth under appropriate subheadings for the convenience of the Examiner.